KEEP PERMIT AT SITE **CONTROL NO. B- 03907**

State of Maryland

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Management Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

[X] Part 70 Operating Permit

PERMIT NO. 24-015-0079

DATE ISSUED July 1, 2013

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B(b)

EXPIRATION DATE June 30, 2018

LEGAL OWNER & ADDRESS
W.L. Gore & Associates, Inc.
2401 Singerly Road
Elkton, MD 21921
Attn: Ms. Sally Hawke, Plant Leader

SITE
Cherry Hill Plant

Cecil County
AI#128

SOURCE DESCRIPTION

Fluoropolymer Material (FPM) Manufacturing Facility consisting of dryers, ovens and other miscellaneous equipments.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Management Administration

(NOT TRANSFERABLE)

W.L. GORE & ASSOCIATES, INC
CHERRY HILL PLANT
2401 SINGERLY ROAD, ELKTON, MD 21921
PART 70 OPERATING PERMIT NO. 24-015-0079

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

W. L. Gore & Associates, Inc. is a worldwide manufacturing corporation with headquarters in Newark, Delaware. W. L. Gore & Associates, Inc. – Cherry Hill facility is located at 2401 Singerly Road in Cecil County, Maryland. The Cherry Hill facility operations utilize fluoropolymer material (FPM) forming and stretching equipment. The primary SIC for this facility is 3087.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
EU 1-1 Particulate Matter Emitting Units	6-0104	0	Dust Collector: Dusty	05/2001
		62347	Mixing and Compounding	05/2001
		63203	Mixing and Compounding	07/2002
		1931985	Mixing and Compounding – Fugitive emissions	12/2007
EU 2-1 Boilers	4-0223 & 4-0224	0	Two (2) Burnham No.2 fuel oil/propane fired boilers each rated at 9.45 million Btu per hour heat input and equipped with low NO_X burners. Boilers modified on February 8, 2008 to burn used oil and waste combustible fuels.	12/2006 Modified 2/8/08
	4-0156	5456	One (1) Weil McLain No. 2 fuel oil boiler rated at 4.9 million Btu per hour heat input. Boiler modified on February 8, 2008 to burn used oil and waste combustible fuels	03/1985 Modified 2/8/08
	4-0200	2594	One (1) Weil McLain No. 2 fuel oil boiler rated at 8.6 million Btu per hour heat input. Boiler modified on February 8, 2008 to burn used oil and waste combustible fuels	11/1997 Modified 2/8/08

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
EU2-2 Emergency Generator	9-0169	0	One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator	12/2006
EU 3-1 Natural FPM Product Area vented through the oxidizer control system	6-0102	2203	R&D Wing (TD1) Oven vented to the oxidizer control system & atmosphere.	01//1995
	6-0260	1316	One dryer vented to an oxidizer control system	Pre-1990
	6-0275	74799	Dryer-Med tenter vented to an oxidizer control system.	08/2007
	6-0285	74817	Dryer-Med tenter vented to an oxidizer control system	08/2008
	6-0317	20000806	Extruder	2012
	6-0318	976	Extruder	Pre-1989
	7-0045	1314, 1632,* 2056, 1381	Four (4) Drum dryers located in the FPM Area vented to the oxidizer control system and vented to the atmosphere.	Pre-1990
	7-0045	74837	Extruder	Pre-1990
	7-0045	20006547	Extruder	Pre-1990
EU 3-2 Filled FPM Products Area vented through the oxidizer control system	6-0126	2383	Dryer (TD2) located in the filled area vented to the oxidizer control system and to the atmosphere.	10/1996
	6-0276	2404	Dryer (TD3) located in the FPM area vented to the oxidizer control system and to the atmosphere.	07/1997
	6-0131	2204	Oven (GT7) located in the R&D area vented to the oxidizer control system and to the atmosphere.	12/1996
	6-0279	2615	R&D oven vented to an oxidizer control system.	05/1999
	6-0311	60265	Mini Tech dryer vented to an oxidizer control system.	03/2012
EU 3-3 FPM Processing	6-0041	2365 & 2366	Two (2) R&D ovens located in the Filled Product area vented to the atmosphere.	07/1992 & 10/2003

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
Area vented to atmosphere	6-0073	2573	One (1) drying oven in FP and vented to the atmosphere.	01/1999
	6-0130	2281, 2260, 2505	Three (3) electric ovens**:** Two (2) located in the Resin area Lab; one (1) in the Gen Lab: and all vented to the atmosphere.	08/1982, 09/1999
EU 3-4 Ovens vented to Oxidizer control system	6-0173 M	2439, 2440	Two (2) batch-drying ovens vented to the oxidizer control system to control VOC emissions and vented to the atmosphere.	03/1997
		2597 & 2598	Two (2) batch-drying ovens vented to the oxidizer control system to control VOC emissions and vented to the atmosphere.	01/1999
		2369, 60535, 62581	Oxidizer Control System consisting of Willie, Sara & Tec.	06/1996;03/1999; 01/2002
	6-0278	60648	One Rover dryer vented to the oxidizer control system and vented to the atmosphere.	12/1999
EU 4-1 VOC Storage Tanks		BAY Boiler TK	Storage Tanks	05/2007
		BAYCH-600 TK1		08/2007
		BAYCH-600 TK2		08/2007
		EM.Gen (400 kW)		
		EM.Gen (800 kW)		12/2006
		FP Mezz #23		
		TK 164-01		
		TK 1709-01		Pre-1990
		TK 1709-02		Pre-1990
		TK 1709-03		Pre-1990
		TK 2402-01		Pre-1990

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
		TK 2453-03		Pre-1990
		TK 2452-04		Pre-1991
		TK 2452-05		Pre-1993
		TK 2452-06		Pre-1992
		TKno-name		Pre-1990

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARMA	Air and Radiation Management Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide

TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to

the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any

new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system

designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons performing maintenance, service, repairs or disposal of appliances shall certify with the Administrator pursuant to 40 CFR 82.162.

e. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.166.

f. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. **[Reference: COMAR 26.11.03.06C(5)(g)]**

Table IV – 1	
1.0	**Emissions Unit Number(s): EU 1-1** Particulate Matter Emitting Units: Mixing and Compounding (6-0104)
1.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.06.02C(1)** – Visible Emission Standards. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity." COMAR 26.11.06.02A(2) – General Exception. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period." B. Control of Particulate Matter Emissions **COMAR 26.11.06.03B(1)** – Particulate Matter from Confined Sources. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/scfd (115 kg/dscm)."

Table IV – 1	
1.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements B. Control of Particulate Matter Emissions See Monitoring Requirements
1.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall conduct a monthly 6-minute visual observation of the baghouse exhaust. The visual observation must be conducted while the baghouse is in operation. If no visible emissions are observed in six consecutive monthly observations from the baghouse exhaust, the Permittee may decrease the frequency of visual observations from monthly to quarterly for the baghouse exhaust. If visible emissions are observed during any quarterly visual observation, the Permittee must resume the observation of the baghouse exhaust on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly visual observations. If visible emissions are observed during any observation, the Permittee must conduct an 18-minute test of opacity in accordance with Method 9. The Method 9 test must begin within 24-hour of any observation of visible emissions. **[Reference: COMAR 26.11.03.06C]** B. Control of Particulate Matter Emissions The Permittee shall update and maintain the preventive maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. **[Reference: COMAR 26.11.03.06C].**
1.4	**Record Keeping Requirements:** A. Control of Visible Emissions The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C]**

Table IV – 1	
	B. Control of Particulate Matter Emissions The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation. **[Reference: COMAR 26.11.03.06C].**
1.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" B. Control of Particulate Matter Emissions The Permittee shall submit a copy of the preventive maintenance plan, records of maintenance activities and corrective actions taken to the Department upon request. **[Reference: COMAR 26.11.03.06C].**

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Table IV – 2	
2.0	**Emissions Unit Number(s): EU2-1** Boilers: Two (2) Burnham No.2 fuel oil/propane gas fired boilers each rated at 9.45 million Btu per hour heat input and equipped with low NO_X burners. (Boilers #4 & #5) [4-0223 & 4-0224] One (1) Weil McLain No. 2 fuel oil boiler rated at 4.9 million Btu per hour heat input. (Boiler #1) [4-0156] One (1) Weil McLain No. 2 fuel oil boiler rated at 8.6 million Btu per hour heat input. (Boiler #3) [4-0200] The Permittee applied and was issued a modification to the boilers on February 8, 2008 to burn used oil and waste combustible fuels.

Table IV – 2	
2.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05A(1)** - Fuel Burning Equipment. "A person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity." COMAR 26.11.09.05A(3) - Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period." B. Control of Sulfur Oxides Emissions **COMAR 26.11.09.07A(1)(c)**. Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: Distillate fuel oils, 0.3 percent." C. Operational Limits The boilers shall burn No. 2 fuel oil, propane, used oil or waste combustible fluids only. **[Reference: MDE Permit to Construct Nos. 015-0079-4-0223 & 4-0224, 4-0156, & 4-0200 Part C(2) issued February 8, 2008]**
2.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements B. Control of Sulfur Oxides Emissions. See Monitoring Requirements C. Operational Limits See Record Keeping Requirements.
2.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions. [**Reference: COMAR 26.11.03.06C**]

Table IV – 2	
	B. Control of Sulfur Oxides Emissions. The Permittee shall obtain a certification from the fuel supplier with every shipment indicating that the oil complies with the limitation on the sulfur content of fuel oil. [**Reference: COMAR 26.11.03.06C**]**.** C. Operational Limits See Record Keeping Requirements.
2.4	**Record Keeping Requirements:** NOTE: **All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].** A. Control of Visible Emissions The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. [**Reference: COMAR 26.11.03.06C].** B. Control of Sulfur Oxides Emissions. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation [**Reference: COMAR 26.11.09.07C].** C. Operational Limits The Permittee shall retain records of plant-wide fuel usage and hours of operation for the boilers on site. **[Reference: MDE Permit to Construct Nos. 015-0079-4-0223 & 4-0224, 4-0156, & 4-0200 Part D(1) issued February 8, 2008]**
2.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, “Report of Excess Emissions and Deviations” B. Control of Sulfur Oxides Emissions. The Permittee shall report fuel supplier certifications to the Department upon request [**Reference: COMAR 26.11.09.07C]**

Table IV – 2	
	C. Operational Limits The Permittee shall submit records of the quantity and type of fuels burned with the annual emissions certification report. See permit condition 8 of Section III.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Table IV – 2a	
2a.0	**Emissions Unit Number(s): EU2-1 Cont'd** Boilers: Two (2) Burnham No.2 fuel oil/propane gas fired boilers each rated at 9.45 million Btu per hour heat input and equipped with low NO_X burners. (Boilers #4 & #5) [4-0223 & 4-0224] One (1) Weil McLain No. 2 fuel oil boiler rated at 4.9 million Btu per hour heat input. (Boiler #1) [4-0156] One (1) Weil McLain No. 2 fuel oil boiler rated at 8.6 million Btu per hour heat input. (Boiler #3) [4-0200] The Permittee applied and was issued a modification to the boilers on February 8, 2008 to burn used oil and waste combustible fuels.
2a.1	**Applicable Standards/Limits:** Control of HAPs: **40 CFR Part 63, Subpart JJJJJJ – Requirements for Existing Oil Fired Boilers less than 10 million Btu/hr heat input** 1. "You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler." **[Reference: 40 CFR §63.11201(b)]** a. "Existing or new biomass or oil - Conduct a tune-up of the boiler biennially as specified in §63.11223." **[Reference: 40 CFR §63.11201(b) and Table 2, Item 3]** 2. "These standards apply at all times." **[Reference: 40 CFR §63.11201(d)]** 3. "If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management standard no later

Table IV – 2a	
	than March 21, 2014." **[Reference: 40 CFR §63.11196(a)(1) and 40 CFR §63.11210(c)]**
2a.2	**Testing Requirements:** Control of HAPs: 1. The Permittee must conduct a biennial performance tune-up no more than 25 months after the previous tune-up. **[Reference: 40 CFR §63.11223(a)]** 2. The Permittee must conduct a biennial tune-up of the boiler to demonstrate continuous compliance as specified below: a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months). b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. d. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available. e. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). f. Maintain onsite and submit, if requested by the Department, a biennial report containing the following information: i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler. ii. A description of any corrective actions taken as a part of the tune-up of the boiler. iii. The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler. g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **[Reference: 40 CFR §63.11223(b)(1) through (7)]**

Table IV – 2a	
2a.3	**Monitoring Requirements:** Control of HAPs: The Permittee must operate and maintain, at all times, any affected source, including air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. **[Reference: 40 CFR §63.11205(a)]**
2a.4	**Record Keeping Requirements:** Control of HAPs: 1. The Permittee must keep a copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted as required in 40 CFR §63.10(b)(2)(xiv). **[Reference: 40 CFR §63.11225(c)(1)]** 2. The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 as follows: a. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. b. Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure. **[Reference 40 CFR §63.11225(c)(2)]** 3. The Permittee must keep records of the occurrence and duration of each malfunction of the boiler or of associated air pollution control equipment and monitoring equipment. **[Reference: 40 CFR §63.11225(c)(4)]** 4. The Permittee must keep records of actions taken during periods of malfunctions to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler to it's normal or usual manner of operation. **[Reference: 40 CFR §63.11225(c)(5)]** 5. The Permittee must keep the records in a form suitable and readily available for expeditious review. Each record must be kept for five (5) years following the date of each recorded action. The records must

Table IV – 2a	
	remain on site for at least two (2) years after the date of each recorded action. **[Reference: 40 CFR §63.11225(d)]**
2a.5	**Reporting Requirements:** Control of HAPs: 1. The Permittee must submit all applicable notifications in 40 CFR §63.7(b), §63.8(e), §63.9(b) through (e), and §63.9(g) and (h). **[Reference: 40 CFR §63.11225(a)(1)]** 2. The Permittee must submit an Initial Notification, as specified in 40 CFR §63.9(b)(2), no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. **[Reference: 40 CFR §63.11225(a)(2)]** 3. The Permittee must submit the Notification of Compliance Status in accordance with 40 CFR §63.9(h) no later than 120 days after the applicable compliance date specified in 40 CFR §63.11196. In addition to the information required in 40 CFR §63.9(h)(2), your notification must include the following certification of compliance, as applicable, and signed by a responsible official: "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler." **[40 CFR §63.11225(a)(4)(i) and 40 CFR §63.11214(b)]** 4. By March 1 of each affected calendar year, the Permittee must prepare a biennial compliance certification report for the previous two (2) calendar years containing the information specified in 40 CFR §63.11225(b). The Permittee must submit the report by March 15 if the Permittee had any instance described by 40 CFR §63.11225(b)(3). The compliance report must contain the following information: a. Company name and address. b. Statement by a responsible official certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and requirements of 40 CFR 63, Subpart JJJJJJ. c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, time periods during which the deviations occurred, and the corrective actions taken. **[Reference: 40 CFR §63.11225(b)(1) through (3)]**

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Table IV – 3	
3.0	**Emissions Unit Number(s): EU2-2** Emergency Generator One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator. (6-0169)
3.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05E** - Stationary Internal Combustion Engine Powered Equipment. "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. (3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. (4) Exceptions. (a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system. (b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods: (i) Engines that are idled continuously when not in service: 30 minutes; (ii) All other engines: 15 minutes. (c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics." B. Control of Sulfur Oxides Emissions **COMAR 26.11.09.07A(1)(c)**. Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: Distillate fuel oils, 0.3 percent." C. Operational Limits The emergency generator shall be used for emergency use only and shall not operate more than 500 hours a year, unless the Permittee obtains prior written approval from the Department. **[Reference: MDE Permit to Construct Nos. 9-0169 Part D(2) issued May 15, 2007]**

Table IV – 3	
3.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements B. Control of Sulfur Oxides Emissions. See Monitoring Requirements C. Operational Limits See Record Keeping Requirements.
3.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall properly operate and maintain the emergency generator in a manner to prevent visible emissions. [**Reference: COMAR 26.11.03.06C**] B. Control of Sulfur Oxides Emissions. The Permittee shall obtain a certification from the fuel supplier that the fuel oil is in compliance with the sulfur in fuel limitation. **[Reference: COMAR 26.11.03.06C]** C. Operational Limits The Permittee shall maintain a log for the emergency generator indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e. maintenance or operational testing, power outage, etc.) **[Reference: Permit to construct No. 9-0169, Part E(1) issued May 15, 2007]**
3.4	**Record Keeping Requirements:** NOTE: **All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].** A. Control of Visible Emissions The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. [**Reference: COMAR 26.11.03.06C].** B. Control of Sulfur Oxides Emissions. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation [**Reference: COMAR**

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	26.11.09.07C]. C. Operational Limits The Permittee shall maintain logs on site for at least five (5) years and make available to the Department upon request. **[Reference: MDE Permit to construct No. 9-0169, Part E(1) issued May 15, 2007]**
3.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, "Report of Excess Emissions and Deviations" B. Control of Sulfur Oxides Emissions. The Permittee shall report fuel supplier certifications to the Department upon request [**Reference: COMAR 26.11.09.07C]** C. Operational Limits The Permittee shall submit a record of the logs with the annual emissions certification report. See permit condition 8 of Section III. [**Reference: COMAR 26.11.03.06C]**

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Table IV – 3a	
3a.0	**Emissions Unit Number(s): EU2-2 Cont'd** Emergency Generator One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator. (6-0169)
3a.1	**Applicable Standards/Limits:** **§63.6595 - When do I have to comply with this subpart?** (a) *Affected sources.* (1)" ….. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, **or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3,**

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2013. …..".

§63.6603 - What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

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	§63.6605 - What are my general requirements for complying with this subpart? "(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."
3a.2	**Testing Requirements:** No Requirements
3a.3	**Monitoring Requirements:** **§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?** "(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: (3) An **existing emergency** or black start stationary RICE located at an area source of HAP emissions." "(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or **an existing emergency stationary RICE located at an area source of HAP emissions,** you must install a non-resettable hour meter if one is not already installed."

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	"(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine." **§63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?** (a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart. (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must

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	also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. "(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or **an existing emergency stationary RICE located at an area source of HAP emissions**, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines. (i) There is no time limit on the use of emergency stationary RICE in emergency situations. (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. (iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity

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	or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power."
3a.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** **§63.6655 - What records must I keep?** "(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary emergency RICE. (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart." "(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines."

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3a.5	**Reporting Requirements:** "Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable." **[Footnote 2 of Table 2d]**

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

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4.0	**Emissions Unit Number(s): EU3-1, EU3-2, EU3-3, EU3-4** **EU 3-1**: Natural FPM Product Area vented through the oxidizer control system. **EU 3-2**: Filled FPM Products Area vented through the oxidizer control system. **EU 3-3**: FPM Processing Area vented to atmosphere. **EU 3-4**: Ovens vented to Oxidizer control system
4.1	**Applicable Standards/Limits:** Control of VOC Emissions **COMAR 26.11.19.02I** – Good Operating Practices, Equipment Cleanup and VOC Storage "(1) Applicability. The requirements in this section apply to a person who owns or operates an installation that is subject to any requirement in this chapter. (2) Good Operating Practices. (a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere. (b) Good operating practices shall, at a minimum, include the following: (i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment; (ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use; (iii) Minimize spills of VOC-containing cleaning materials; (iv) Convey VOC-containing cleaning materials from one location to another in closed containers or pipelines; (v) Minimize VOC emissions from cleaning of storage, mixing, and

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	conveying equipment; (vi) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun; (vii) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and (viii) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC. (c) A person subject to this regulation shall: (i) Establish good operating practices in writing; (ii) Make the written operating practices available to the Department upon request; and (iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training. (3) Equipment Cleanup. (a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps. (b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following: (i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers; (ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used; (iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and (iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment. (4) VOC Storage and Transfer. (a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more to minimize VOC emissions. (b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia. “

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4.2	**Testing Requirements:** Control of VOC Emissions See Monitoring Requirements.
4.3	**Monitoring Requirements:** Control of VOC Emissions The Permittee shall conduct facility-wide inspections at least once per calendar month to determine the compliance status of facility operations with regard to implementation of "good operating practices" designed to minimize emissions of VOC. **[Reference: COMAR 26.11.03.06C**]
4.4	**Record Keeping Requirements:** Control of VOC Emissions The Permittee shall maintain: (1) Written descriptions of all "good operating practices" designed to minimize emissions of VOC from facility-wide operations. **[Reference: COMAR 26.11.19.02I]** (2) Records of all inspections conducted to determine the facility's compliance status with regard to implementation of "good operating practices" designed to minimize emissions of VOC from facility-wide operations. The records shall include for each inspection the name of the inspector, the date and time of the inspection, and an account of the findings. **[Reference: COMAR 26.11.03.06C]**
4.5	**Reporting Requirements:** Control of VOC Emissions Good operating practices information as required by COMAR 26.11.19.02I shall be made available to the Department upon request

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

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4a.0	**Emissions Unit Number(s): EU2-2, EU3-1, EU3-2, EU3-3, EU3-4, EU4-1** **EU2-2**: Emergency Generator **EU3-1**: Natural FPM Product Area vented through the oxidizer control system. **EU3-2**: Filled FPM Products Area vented through the oxidizer control system. **EU3-3**: FPM Processing Area vented to atmosphere. **EU3-4**: Ovens vented to Oxidizer control system. **EU4-1**: VOC Storage Tanks
4a.1	**Applicable Standards/Limits:** Control of VOC Emissions **COMAR 26.11.19.16C** - Control of VOC Leaks General Requirements. "A person subject to this regulation shall comply with all of the following requirements: (1) Visually inspect all components on the premises for leaks at least once each calendar month. (2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak has been repaired. (3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours. (4) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part. (5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe fittings. (6) Maintain a log that includes the name of the person conducting the inspection and the date on which leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Leak records shall be maintained for a period of not less than 2 years from the date of their occurrence." **COMAR 26.11.19.16D**. Exceptions. "Components that cannot be repaired as required in this regulation because they are inaccessible, or that cannot be repaired during operation of the source, shall be identified in the log

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	and included within the source's maintenance schedule for repair during the next source shutdown."
4a.2	**Testing Requirements:** Control of VOC Emissions See Monitoring Requirements
4a.3	**Monitoring Requirements:** Control of VOC Emissions The Permittee shall: (1) Visually inspect all components (process equipment, storage tanks, pumps, compressors, valves, flanges, pipeline fittings, pressure relief valves) at the facility for VOC leaks at least once each calendar month; (2) Tag any VOC leak immediately with I.D. Number, the date VOC leak was discovered, and the name of the person who discovered the VOC leak. The tag is to remain in place until the VOC leak is repaired; (3) Take immediate action to repair/control all observed VOC leaks that can be repaired within 48 hours; (4) Repair all other VOC leaking components not later than 15 days after the VOC leak is discovered in accordance with COMAR 26.11.19.16C(4); (5) If a replacement part is needed, it shall be ordered within 3 days after discovery of the VOC leak and the leak shall be repaired within 48 hours after receiving the part; (6) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced; and (7) Identify in a log components that cannot be repaired as required by this regulation because they are inaccessible, or that cannot be repaired during operation of the source, and include them within the source's maintenance schedule for repair during the next source shutdown. **[Reference: COMAR 26.11.19.16C and D]**
4a.4	**Record Keeping Requirements:** Control of VOC Emissions The Permittee shall: (1) Maintain a log that includes the name of the person conducting the inspection, the date on which VOC leak inspection was made, the findings of the inspection, a list of VOC leaks by tag identification number, the date the part was ordered, and the date the VOC leak was repaired; and

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	(2) Make the log available to the Department upon request and shall be maintained for a period of not less than two years from the date of the VOC leaks' occurrence. **[Reference: COMAR 26.11.19.16C(6)]**
4a.5	**Reporting Requirements:** Control of VOC Emissions VOC Leak inspection logs as required by COMAR 26.11.19.16 shall be made available to the Department upon request.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

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5.0	**Emissions Unit Number(s): EU3-1, EU3-2, EU3-3, EU3-4** **EU3-1**: Natural FPM Product Area vented through the oxidizer control system. **EU3-2**: Filled FPM Products Area vented through the oxidizer control system. **EU3-3**: FPM Processing Area vented to atmosphere. **EU3-4**: Ovens vented to Oxidizer control system.
5.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.06.02C(1)** – Visible Emission Standards. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity." COMAR 26.11.06.02A(2) – General Exception. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

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	B. Control of VOC Emissions **COMAR 26.11.19.30E** – General Requirements for FPM Process Installations "(1) A person who owns or operates an FPM process installation that has actual uncontrolled VOC emissions of 50 pounds or more per day shall vent the emissions into a thermal oxidizer system or other control method approved by the Department to destroy or reduce VOC emissions by 85 percent or more, overall. (2) If a thermal oxidizer is installed, the oxidizer combustion chamber shall be: (a) Operated at a minimum combustion chamber temperature of 1400°F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation; (b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and (c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved temperature; and (d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating. (3) If a source uses an alternative control method approved by the Department, the alternative control method shall be monitored as required by the Department. (4) Equipment that is installed for the purpose of treating emissions or monitoring shall be operated, maintained, and as applicable, calibrated in accordance with the equipment vendor's specifications. (5) A person who owns or operates an FPM compounding and tape or shape-forming installation shall minimize fugitive emissions of VOC by: (a) Immediately enclosing all wet FPM during storage; and (b) Covering dipping troughs when not in operation. (6) A person who owns or operates an FPM coating installation that has actual uncontrolled VOC emissions of 20 pounds or more per day may not use a coating that has a VOC content exceeding 2.9 pounds per gallon unless the installation is equipped with a control device that meets the requirements in §E(2), (3), and (4) of this regulation."
5.2	**Testing Requirements:** A. Control of Visible Emissions See Monitoring Requirements.

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	B. Control of VOC Emissions **COMAR 26.11.19.30F**. Demonstration of Compliance. "Compliance with this regulation shall be demonstrated using the applicable VOC test methods specified in COMAR 26.11.01.04C or other test method approved by the Department." The Permittee shall conduct performance testing of the primary oxidizer in the control system once during the 5-year term of the permit. [**Reference: COMAR 26.11.03.06C].**
5.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall visually inspect the exhaust of the oxidizer control system at least monthly for a 6-minute period when the process lines are in operation and shall record the result of each observation. If no visible emissions are observed in six consecutive monthly observations, the frequency of the visual observation may decrease from monthly to quarterly. If emissions are visible greater than 20 percent opacity from the oxidizer control system, the Permittee shall perform the following unless it can be shown through a Method 9 test, that the visible emissions are zero percent opacity: (a) inspect all process and/or control equipment related to emission point; (b) perform all necessary repairs and/or adjustments to the oxidizers, within 48 hours, so that visible emissions in the exhaust gases are less than 20 percent opacity; and (c) document, in writing, the results of the inspections and the repairs and/or adjustments made to the oxidizers. If visible emissions greater than 20 percent opacity have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation for 18-minutes once daily when the process lines are in operation until the visible emissions have been reduced to less than 20 percent opacity. **[Reference: COMAR 26.11.03.06C]** B. Control of VOC Emissions For the oxidizer control system, the combustion chamber shall be: (a) Operated at a minimum combustion chamber temperature of 1400 ^{o}F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation; (b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and (c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved

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	temperature; and (d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating." [Reference: **COMAR 26.11.19.30E(2)].** The Permittee shall perform checks semi-annually on the thermocouples that monitor the temperatures to the oxidizer control system for accuracy. [**Reference: COMAR 26.11.03.06C].** See CAM Plan (40 CFR Part 64 – Compliance Assurance Monitoring) in Table 6 for additional Monitoring Requirements.
5.4	**<u>Record Keeping Requirements</u>:** A. <u>Control of Visible Emissions</u> The Permittee shall keep records of the results of visual emission observations and document any incidence of visible emissions and corrective action taken by the Permittee. **[Reference: COMAR 26.11.03.06C]** B. <u>Control of VOC Emissions</u> The following records shall be kept on site for a period of at least five (5) years except for the design data, which shall be retained permanently. The records shall be made available to the Department on request: (1) Permanent records**,** for the life of the equipment**,** of pertinent design data for the control device including manufacturer specifications and/or vendor guarantees for the control device and catalyst, catalyst requirements, design space velocity, operating limits, volume and configuration of catalyst required; (2) Maintenance records of types and dates of work performed on the oxidizer control system; (3) Records of the combustion chamber temperature, which shall be greater than 1400 ^{o}F any time a controlled process line is in operation; and (4) Records of the results of destruction efficiency tests. (5) The Permittee shall keep records of the damper position and corresponding chamber temperature on site for at least five years. (6) The Permittee shall keep records of the semi-annual checks of the thermocouples on site for at least five years. **[Reference: COMAR 26.11.03.06C]**

Table IV – 5	
5.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" B. Control of VOC Emissions The Permittee shall submit a test protocol to the Department for approval at least 30 days prior to proposed date of the test. The Permittee shall report results of the performance testing to the Department within 45 days after completion of the test. The Permittee shall make the records of the thermo couple checks made available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Table IV-6			
COMPLIANCE ASSURANCE MONITORING REQUIREMENTS – PART 64			
EU 3-1, EU 3-2 and EU 3-4: Process Dryers and Ovens **Oxidizer Control System (OCS) consisting of the following:** **Regenerative Thermal Oxidizer #1 (SARA, CH62581);** **Regenerative Thermal Oxidizer #2 (TEC, CH2369);** **Regenerative Thermal Oxidizer #3 (WILLIE, CH60535)**			
Applicable Requirement	**VOC:**		
I. Indicator	**Combustion Zone Temperature**	**Visible Emissions**	**Stack Testing**
II. Measurement Approach	The combustion zone temperature is measured using thermocouples that are located within the combustion	Periodic observations of the OCS stack can indicate if visible emissions are present.	VOC Emissions are sampled using EPA Reference Method 25A, a continuous extractive sample (40 CFR 60 Appendix A)

	zone.		
III. Indicator Range	An excursion occurs when the combustion zone temperature drops below 1400 ^{o}F or other temperature approved by the Department, while processes are venting to the oxidizer. Audible and visual alarms will alert oxidizer operators to a temperature dropping below 1400 ^{o}F (or other Department approved temperature), and the oxidizer will automatically remove the permissive to operate from all users prior to the temperature reaching set point. An excursion will trigger an investigation	Quarterly observations are performed for a 6-minute period, while process lines are in operation and being controlled by the OCS.	Stack Test must show a destruction efficiency of 85 percent or greater.

	and corrective action, and if lasting longer than one hour, a reporting requirement.		
IV Performance Criteria			
A. Data Representativeness	The combustion zone temperatures are measured using thermocouples located within the combustion zone. The minimum accuracy of the thermocouple is ±2 degrees F.	A Method 9 visible emissions observation is performed.	See EPA Reference Method 25A.
B. Verification of Operational Status	N/A	N/A	See EPA Reference Method 25A
C. QA/QC Practices and Criteria	Annual replacement of the combustion zone thermocouples	N/A	See EPA Reference Method 25A.
D. Monitoring Frequency	The combustion zone temperature is monitored	Quarterly observations	The stack test is performed within 180 days of startup of unit.
E. Data Collection Procedures	Temperatures are recorded	The 6-minute	See EPA Reference

	to a strip chart. The chart recorder is electronically backed up on the data logger and is saved each month.	observation shall be documented and maintained for a period of at least 5 years.	Method 25A, the results are reported to the permitted authority.
F. Averaging Period	6-minute average	N/A	N/A

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 12 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas I, II, V, and VI]

The *fuel burning units* are subject to the following requirements: COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.
Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 2 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The *affected units* are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the

discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:
(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.
(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(D) COMAR 26.11.36.03A(1), which establishes that the Permittee may not operate an emergency generator except for emergencies, testing and maintenance purposes.

(E) COMAR 26.11.36.03A(5), which establishes that the Permittee may not operate an emergency generator for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(3) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(4) No. 217 Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The *affected units* are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(a) Monthly records of the total VOC degreasing materials used; and

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(5) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 30 Storage of lubricating oils;

(c) No. 5 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(d) No. 324 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(6) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(7) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(8) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;

(9) ✓ Potable water treatment equipment, not including air stripping equipment;

(10) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(11) ✓ Laboratory fume hoods and vents;

For the following, attach additional pages as necessary:

(12) any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

Installation Date	**General Category**	**Describe this equipment**	**CH Nos.**
Jun-89	Forming	Extruder	447
Jun-89	Forming	Extruder	1304
Jun-89	Forming	Extruder	1322
Jun-89	Forming	Extruder	1323
Jun-92	Forming	Extruder	1949
Pre-1990	Forming	Extruder	2013
Pre-1990	Forming	Extruder	2052
Pre-1990	Forming	Extruder	2069
Pre-1990	Forming	Extruder	2371
Dec-07	Forming	Extruder	1991534
Pre-1990	Forming	Extruder	2101
Pre-1990	Forming	Extruder	976
Pre-1990	Misc	Bag Dump Stations	0
Jul-02	Shaping	FM Line	45159
Oct-04	Shaping	Heat treat exhausts	65128
Mar-05	Shaping	Tenter for wet tapes	2180

(13) any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

Installation Date	General Category	Describe this equipment	CH Nos.
Jan-85	Misc	Paint Booth	5800
Dec-07	Conditioning	Pellet Oven	74820
Mar-07	Conditioning	Pellet Oven	0
Pre-1990	Conditioning	Pellet Oven	2166
Pre-1990	Conditioning	Pellet Oven	2413
Pre-1990	Conditioning	Pellet Oven	2443
Pre-1990	Conditioning	Pellet Oven	2444
Pre-1990	Conditioning	Pellet Oven	2445
Jun-89	Drying	Dryer Rolldown	126
Aug-82	Drying	Lab Ovens	963
Pre-1990	Drying	Lab Ovens	2211
Nov-95	Drying	Ovens, R&D	2328
Jan-02	Forming	R&D ACIS	62347
Nov-02	Forming	R&D Jenny	62924
Jan-12	Heat Treat	Lab Oven	
Pre-1990	Misc	Chem Storage Cabinets	0
2011	Misc	Propane Vaporizers	0
12/23/2008	Misc	Slitter	
Jan-07	Misc	Steam Generators	
Jan-07	Misc	Steam Generators	
Jan-07	Misc	Steam Generators	
Jan-07	Misc	Steam Generators	
Jan-85	Misc	Welding Hood	
Sep-08	Shaping	Calendaring w/dip	2218692
Pre-1989	Shaping	Calendaring line	244
Pre-1990	Shaping	Calendaring line	1693
Mar-03	Shaping	Calendaring line	6044
Jan-07	Shaping	Calendaring line	74770
	Shaping	Calendaring line	825
	Shaping	Calendaring line	1367
	Shaping	Calendaring line	1368
	Shaping	Calendaring line	1393
	Shaping	Calendaring line	2055
	Shaping	Calendaring line	2070
	Shaping	Calendaring line	2606
Pre-1990	Shaping	Calendaring w/dip	238
Pre-1990	Shaping	Calendaring w/dip	239
Pre-1990	Shaping	Calendaring w/dip	242
Pre-1989	Shaping	Calendaring w/dip	242
Pre-1990	Shaping	Calendaring w/dip	244
Jan-11	Shaping	Expander	20006546
Jan-02	Shaping	Heat treat exhaust	62933
Aug-02	Shaping	Heat treat exhaust	74794
Pre-1989	Shaping	Heat treat exhaust	853
Pre-1989	Shaping	Heat treat exhaust	982

Installation Date	General Category	Describe this equipment	CH Nos.
Pre-1989	Shaping	Heat treat exhaust	1425
Pre-1989	Shaping	Heat treat exhaust	1761
Pre-1990	Shaping	Heat treat exhaust	2344
2002	Shaping	Heat treat exhaust	2411
2003	Shaping	Heat treat exhaust	61670
Nov-08	Shaping	Heat treat exhaust	76724
Dec-08	Shaping	Heat treat exhaust	79796
May-07	Shaping	Heat treat, dry	72974
	Shaping	Plate Machine w/IK dip	2310

No. 1 _____

No. 1 _____

No. 1 _____

No. 1 _____

No. 1 _____

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   (a) COMAR 26.11.06.08 - Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

   (b) COMAR 26.11.06.09 – Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that nuisance or air pollution is created."

   Emission Unit: EU2-1 - Boilers

   (c) COMAR 26.11.09.10 - Requirements to Burn Used Oil and Waste Combustible Fluid as Fuel.
   "A. General Requirements.
   (1) A person who proposes to burn used oil in fuel-burning equipment shall submit the following information to the Department:
   (a) A description of any fuel-burning equipment in which used oil is to be burned, including the unit's location and rated heat input capacity;
   (b) The type and amount of fuel currently being used in any fuel-burning equipment in which used oil is to be burned and the gallons of used oil expected to be burned annually;
   (c) The maximum blend (percent) of used oil to be burned as fuel in any fuel-burning equipment at any time; and
   (d) An analysis by an independent laboratory of a representative sample of the used oil, which shall include the concentration of each of the materials listed in §B of this regulation, the sulfur content, the PCB concentration, and the flash point.
   (2) A person who burns fuel oil in fuel-burning equipment with a rated heat input capacity less than 50 million Btu per hour in accordance with a permit to construct or a registration pursuant to COMAR 26.11.02.02A may burn on-specification used oil in that equipment after submitting the information in §A(1) of this regulation.
   (3) A person who is burning used oil or WCF under a current written approval from the Department may continue to burn the approved material if:

(a) The person demonstrates that any WCF being burned satisfies the definition of that term in Regulation .01B(23) of this chapter;
(b) The used oil or WCF is being burned in an authorized installation;
(c) The conditions of the approval are continuously met; and
(d) The sulfur requirement in §B(1)(g) of this regulation is not exceeded.
(4) A person shall obtain written approval from the Department before burning:
(a) On-specification used oil in any fuel-burning equipment that has not been registered or previously issued a permit to construct pursuant to COMAR 26.11.02.02 to burn fuel oil;
(b) On-specification used oil in any fuel-burning equipment that has a rated heat input capacity of 50 million Btu per hour or greater;
(c) On-specification used oil in any installation other than fuel-burning equipment; or
(d) Waste combustible fluid or off-specification used oil as fuel in any installation.
(5) A person who obtains written approval from the Department to burn used oil or WCF shall burn only those materials for which approval has been obtained.
(6) Except as provided in §A(7) of this regulation and notwithstanding any applicable conditions in permits issued by the Department, a person may burn off-specification used oil only in those installations listed at 40 CFR §279.12(c).
(7) The requirement to burn off-specification used oil only in those installations listed at 40 CFR §279.12(c) does not apply if the used oil is off-specification only because of the sulfur content.
B. Specifications for Used Oil.
(1) Except as provided in §B(2) of this regulation, used oil specifications are as follows:

Material	Allowable Level
(a) Lead	100 ppm
(b) Total halogens	1,000 ppm
(c) Arsenic	5 ppm
(d) Cadmium	2 ppm
(e) Chromium	10 ppm
(f) Flash point	100°F minimum
(g) Sulphur content	0.5 weight percent

(2) For used oil that satisfies the rebuttable presumption for halogens at 40 CFR §279.10(b)(1)(ii) and 40 CFR §279.63, the maximum allowable level for halogens is 4,000 ppm.

C. Additional Requirements for Burning Used Oil or WCF Containing Polychlorinated Biphenyls (PCBs).
(1) Used oil or WCF containing quantifiable levels of PCB (i.e. 2 ppm or greater, but less than 50 ppm) may be burned only in those installations listed at 40 CFR §279.12(c) or 40 CFR §761.
(2) Used oil or WCF with a PCB concentration of 50 ppm or greater is hazardous waste and may only be burned in accordance with the requirements in COMAR 26.13.07 and 40 CFR §761.
D. Reporting Requirements. By April 1of each year, a person subject to this regulation shall submit a report, in accordance with COMAR 26.11.01.05C, that provides information on:
(1) The quantity of used oil or WCF burned during the previous year; and
(2) The equipment in which the used oil or WCF was burned.

(d) COMAR 26.11.15.05 - Control Technology Requirements.
"A. New or Reconstructed Installations. A person may not construct, reconstruct, operate, or cause to be constructed, reconstructed, or operated, any new installation or source that will discharge a toxic air pollutant to the atmosphere without installing and operating T-BACT."

(e) COMAR 26.11.15.06 - Ambient Impact Requirement.
A. Requirements for New Installations, Sources, or Premises.
(1) Except as provided in §A(2) of this regulation, a person may not construct, modify, or operate, or cause to be constructed, modified, or operated, any new installation or source without first demonstrating to the satisfaction of the Department using procedures established in this chapter that total allowable emissions from the premises of each toxic air pollutant discharged by the new installation or source will not unreasonably endanger human health.
(2) If a new installation or source will discharge a TAP that is not listed in COMAR 26.11.16.07 and will be part of an existing premises, then emissions of that TAP from existing sources or existing installations on the premises may be omitted from a screening analysis unless the TAP is added to COMAR 26.11.16.07.

Emission Unit: EU2-2 - Emergency Generator

COMAR 26.11.36.03A – Emergency Generators and Load Shaving Units NO_X Requirements.

"A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.

(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.

(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.

(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:

(a) Located at a nuclear power plant; or

(b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.

(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.

(5) The owner or operator of an emergency generator or load shaving unit may not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation."

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

(a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

(b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

W.L. GORE & ASSOCIATES, INC
CHERRY HILL PLANT
PERMIT NO. 24-015-0079
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

W. L. Gore & Associates, Inc. is a worldwide manufacturing corporation with headquarters in Newark, Delaware. W. L. Gore & Associates, Inc.–Cherry Hill facility is located at 2401 Singerly Road in Cecil County, Maryland. The Cherry Hill facility operations utilize fluoropolymer material (FPM) forming and stretching equipment. The primary SIC for this facility is 3087

The following table summarizes the actual emissions from the Cherry Hill Plant based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_X (TPY)	SO_X (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2011	12.53	4.38	0.97	5.88	18.41	0
2010	12.77	5.24	0.96	5.69	15.48	0
2009	10.41	3.19	0.97	5.15	12.09	0
2008	12.71	3.24	1.03	2.09	14.73	0
2007	12.01	2.98	0.96	1.24	11.58	0

The major source threshold for triggering Title V permitting requirements in Cecil County is 25 tons per year for NO_X, 25 tons per year for VOC, and 100 tons per year for any other criteria pollutants. The facility's potential to emit VOC emissions are greater than the major source threshold, therefore, W. L. Gore & Associates, Inc.–Cherry Hill Plant is required to obtain a Title V-Part 70 Operating Permit under COMAR 26.11.03.01.

The Department on June 28, 2012 received W. L. Gore & Associates, Inc.–Cherry Hill Plant's Part 70 renewal permit application. An administrative completeness review was conducted and the application was deemed to be administratively complete. A completeness determination letter was sent to the W. L. Gore & Associates, Inc. – Cherry Hill Plant on July 5, 2012 granting the Cherry Hill Plant an application shield

CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT

The following changes and/or modifications have been incorporated into the renewal Title V – Part 70 Operating Permit for Cherry Hill Plant:

Additions to the facility

7/26/12 – Permit to construct issued for modification to heat treat rolldown (Blackhawke II) to include a heated mineral spirits dip bath. [015-0079-6-0320]
5/31/2012 – Permit to construct issued for the installation of two (2) extruders (CH20000806 and CH0976) located in the Natural FPM Production Area. [015-0079-6-0317 & 6-0318]
3/6/2012 – Permit to construct issued for modification to the Mini-Tec Dryer to process materials wet with solvents. [015-0079-6-0311]
12/21/2010 – Permit to construct issued for the installation of one (1) extruder (CH20006547) to replace existing extruder (CH2013) located in the Natural production area. [015-0079-7-0045]
1/13/2009 – Permit to construct issued for the modification of TD3 flotation dryer [CH#2404] located in the Natural Production Area. Emissions are controlled by the Oxidizer Control System (OCS). [015-0079-6-0276]
11/7/2008 – Permit to construct issued for the installation of one (1) extruder [CH74837] to replace the existing extruder [CH1376] located in the Natural production area. [015-0079-7-0045]
10/14/2008 – Permit to construct issued for the installation of fabric membrane line with integral dryer. [015-0079-6-0285]

Removal from the facility

[CH60564] - One (1) batch-drying oven vented to the oxidizer control system to control VOC emissions and vented to the atmosphere.

National Emission Standard for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63

Cherry Hill Plant is not a major HAP Emissions Source. Instead it is an area HAP emission source and is subject to the following MACTs:
Subpart JJJJJJ—Requirements for Existing Oil Fired Boilers less than 10 million Btu/hr heat input
Subpart ZZZZ—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

COMPLIANCE ASSURANCE MONITORING

W.L. Gore & Associates, Inc.-Cherry Hill conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that certain Emission Units: EU3-1, EU3-2, EU3-3, EU3-4 is subject to the (CAM) Rule 40 CFR Subpart 64.

GREENHOUSE GAS (GHG) EMISSIONS

W.L. Gore & Associates, Inc.-Cherry Hill Plant emits the following greenhouse gases (GHG) related to Clean Air Act requirements: carbon dioxide, methane,

and nitrous oxide. These GHG originate from various processes (i.e., waste decomposition and landfill gas fugitives, gas flaring, internal combustion engines, and garage boilers) contained within the facility premises applicable to Cherry Hill Plant. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. The emission certifications reports for the years 2008, 2009, 2010, and 2011 showed that Cherry Hill Plant is not a major source (threshold: 100,000tpy CO_2e) for GHG (see Table 3 shown below). The Permittee shall quantify facility wide GHG emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from W.L. Gore & Associates, Inc.-Cherry Hill Plant based on its Annual Emission Certification Reports:

Table 3: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2008 tpy CO_2e	2009 tpy CO_2e	2010 tpy CO_2e	2011 tpy CO_2e
Carbon dioxide CO_2	1	12350.820	10329.985	12381.424	10489.357
Methane CH_4	21	0.127	0.498	0.148	0.136
Nitrous Oxide N_2O	310	0.552	0.099	0.727	0.699
Total GHG CO_{2eq}		**12351.499**	**10330.581**	**12382.299**	**10490.192**

EMISSION UNIT IDENTIFICATION

W.L. Gore & Associates, Inc.-Cherry Hill has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 2: Emission Unit Identification

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
EU 1-1 Particulate Matter	6-0104	0	Dust Collector: Dusty	05/2001
		62347	Mixing and Compounding	05/2001
		63203	Mixing and Compounding	07/2002

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
Emitting Units		1931985	Mixing and Compounding – Fugitive emissions	12/2007
EU 2-1 Boilers	4-0223 & 4-0224	0	Two (2) Burnham No.2 fuel oil/propane fired boilers each rated at 9.45 million Btu per hour heat input and equipped with low NO_X burners. Boilers modified on February 8, 2008 to burn used oil and waste combustible fuels.	12/2006 Modified 2/8/08
	4-0156	5456	One (1) Weil McLain No. 2 fuel oil boiler rated at 4.9 million Btu per hour heat input. Boiler modified on February 8, 2008 to burn used oil and waste combustible fuels	03/1985 Modified 2/8/08
	4-0200	2594	One (1) Weil McLain No. 2 fuel oil boiler rated at 8.6 million Btu per hour heat input. Boiler modified on February 8, 2008 to burn used oil and waste combustible fuels	11/1997 Modified 2/8/08
EU2-2 Emergency Generator	9-0169	0	One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator	12/2006
EU 3-1 Natural FPM Product Area vented through the oxidizer control system	6-0102	2203	R&D Wing (TD1) Oven vented to the oxidizer control system & atmosphere.	01//1995
	6-0260	1316	One dryer vented to an oxidizer control system	Pre-1990
	6-0275	74799	Dryer-Med tenter vented to an oxidizer control system.	08/2007
	6-0285	74817	Dryer-Med tenter vented to an oxidizer control system	08/2008
	6-0317	20000806	Extruder	2012
	6-0318	976	Extruder	Pre-1989
	7-0045	1314, 1632,* 2056, 1381	Four (4) Drum dryers located in the FPM Area vented to the oxidizer control system and vented to the atmosphere.	Pre-1990

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
	7-0045	74837	Extruder	Pre-1990
	7-0045	20006547	Extruder	Pre-1990
EU 3-2 Filled FPM Products Area vented through the oxidizer control system	6-0126	2383	Dryer (TD2) located in the filled area vented to the oxidizer control system and to the atmosphere.	10/1996
	6-0276	2404	Dryer (TD3) located in the FPM area vented to the oxidizer control system and to the atmosphere.	07/1997
	6-0131	2204	Oven (GT7) located in the R&D area vented to the oxidizer control system and to the atmosphere.	12/1996
	6-0279	2615	R&D oven vented to an oxidizer control system.	05/1999
	6-0311	60265	Mini Tech dryer vented to an oxidizer control system.	03/2012
EU 3-3 FPM Processing Area vented to atmosphere	6-0041	2365 & 2366	Two (2) R&D ovens located in the Filled Product area vented to the atmosphere.	07/1992 & 10/2003
	6-0073	2573	One (1) drying oven in FP and vented to the atmosphere.	01/1999
	6-0130	2281, 2260, 2505	Three (3) electric ovens**:** Two (2) located in the Resin area Lab; one (1) in the Gen Lab: and all vented to the atmosphere.	08/1982, 09/1999
EU 3-4 Ovens vented to Oxidizer control system	6-0173 M	2439, 2440	Two (2) batch-drying ovens vented to the oxidizer control system to control VOC emissions and vented to the atmosphere.	03/1997
		2597 & 2598	Two (2) batch-drying ovens vented to the oxidizer control system to control VOC emissions and vented to the atmosphere.	01/1999

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
		2369, 60535, 62581	Oxidizer Control System consisting of Willie, Sara & Tec.	06/1996;03/1999; 01/2002
	6-0278	60648	One Rover dryer vented to the oxidizer control system and vented to the atmosphere.	12/1999
EU 4-1 VOC Storage Tanks		BAY Boiler TK	Storage Tanks	05/2007
		BAYCH-600 TK1		08/2007
		BAYCH-600 TK2		08/2007
		EM.Gen (400 kW)		
		EM.Gen (800 kW)		12/2006
		FP Mezz #23		
		TK 164-01		
		TK 1709-01		Pre-1990
		TK 1709-02		Pre-1990
		TK 1709-03		Pre-1990
		TK 2402-01		Pre-1990
		TK 2453-03		Pre-1990
		TK 2452-04		Pre-1991
		TK 2452-05		Pre-1993
		TK 2452-06		Pre-1992
		TKno-name		Pre-1990

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emission Units: EU1-1

Particulate Matter Emitting Units: Mixing and Compounding (6-0104)

Note: These installations are minor sources of particulate matter. The emission certification for 2011 reported 0.73 tons of PM_{10}.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.06.02C(1) – Visible Emission Standards. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."

COMAR 26.11.06.02A(2) – General Exception. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

Compliance Demonstration

The Permittee shall conduct a monthly 6-minute visual observation of the baghouse exhaust. The visual observation must be conducted while the baghouse is in operation. If no visible emissions are observed in six consecutive monthly observations from the baghouse exhaust, the Permittee may decrease the frequency of visual observations from monthly to quarterly for the baghouse exhaust. If visible emissions are observed during any quarterly visual observation, the Permittee must resume the observation of the baghouse exhaust on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly visual observations. If visible emissions are observed during any observation, the Permittee must conduct an 18-minute test of opacity in accordance with Method 9. The Method 9 test must begin within 24-hour of any observation of visible emissions. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C]** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations"

Please Note: The Permittee is now performing observations quarterly on the baghouse.

B. Control of Particulate Matter Emissions

COMAR 26.11.06.03B(1) – Particulate Matter from Confined Sources. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/scfd (115 kg/dscm)."

Compliance Demonstration

The Permittee shall update and maintain the preventive maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation. The Permittee shall submit a copy of the preventive maintenance plan, records of maintenance activities and corrective actions taken to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Emission Units: EU2-1

Boilers:

Two (2) Burnham No.2 fuel oil/propane gas fired boilers each rated at 9.45 million Btu per hour heat input and equipped with low NO_X burners. (Boilers #4 & #5) [4-0223 & 4-0224]

One (1) Weil McLain No. 2 fuel oil boiler rated at 4.9 million Btu per hour heat input. (Boiler #1) [4-0156]

One (1) Weil McLain No. 2 fuel oil boiler rated at 8.6 million Btu per hour heat input. (Boiler #3) [4-0200]

The Permittee applied and was issued a modification to the boilers on February 8, 2008 to burn used oil and waste combustible fuels.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05A(1) - Fuel Burning Equipment. "A person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity."

COMAR 26.11.09.05A(3) - Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period."

Compliance Demonstration

The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions. The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. [**Reference: COMAR 26.11.03.06C].** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations"

Rationale for Periodic Monitoring - Boilers that burn No.2 fuel oil with a rated heat input capacity of less than 10 MM Btu/hr typically never have visible emissions if properly operated and maintained. Boilers in this size range are set up to operate in an automatic mode without oversight of an operator. The completion of annual preventative maintenance as recommended by the boiler manufacturer, focusing on combustion performance, is sufficient to maintain compliance with the no visible emissions requirement. Even though there is not a specific schedule to perform observations of the stack emissions, the Permittee is required under the general reporting requirement for excess emissions and deviations to report incidents when visible emissions exceed 20 percent opacity.

B. Control of Sulfur Oxides Emissions

COMAR 26.11.09.07A(1)(c). Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: Distillate fuel oils, 0.3 percent."

Compliance Demonstration
The Permittee shall obtain a certification from the fuel supplier with every shipment indicating that the oil complies with the limitation on the sulfur content of fuel oil. [**Reference: COMAR 26.11.03.06C**]**.** The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation. The Permittee shall report fuel supplier certifications to the Department upon request [**Reference: COMAR 26.11.09.07C]**

Rationale: The strategy for the compliance demonstration is based on the compliance demonstration for NSPS Subpart Dc boilers that burn fuel oil.

C. Operational Limits
The boilers shall burn No. 2 fuel oil, propane, used oil or waste combustible fluids only. **[Reference: MDE Permit to Construct Nos. 015-0079-4-0223 & 4-0224, 4-0156, & 4-0200 Part C(2) issued February 8, 2008]**

Compliance Demonstration
The Permittee shall retain records of plant-wide fuel usage and hours of operation for the boilers on site. **[Reference: MDE Permit to Construct Nos. 015-0079-4-0223 & 4-0224, 4-0156, & 4-0200 Part D(1) issued February 8, 2008]** The Permittee shall submit records of the quantity and type of fuels burned with the annual emissions certification report. See permit condition 8 of Section III. No additional requirements are needed to show compliance with this operational limitation.

Emission Units: EU2-1 Cont'd

Boilers:
Two (2) Burnham No.2 fuel oil/propane gas fired boilers each rated at 9.45 million Btu per hour heat input and equipped with low NO_X burners. (Boilers #4 & #5) [4-0223 & 4-0224]
One (1) Weil McLain No. 2 fuel oil boiler rated at 4.9 million Btu per hour heat input. (Boiler #1) [4-0156]
One (1) Weil McLain No. 2 fuel oil boiler rated at 8.6 million Btu per hour heat input. (Boiler #3) [4-0200]

The Permittee applied and was issued a modification to the boilers on February 8, 2008 to burn used oil and waste combustible fuels.

Applicable Standards and limits:

Control of HAPs:

40 CFR Part 63, Subpart JJJJJJ – Requirements for Existing Oil Fired Boilers less than 10 million Btu/hr heat input

1. "You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler." **[Reference: 40 CFR §63.11201(b)]**
   a. "Existing or new biomass or oil - Conduct a tune-up of the boiler biennially as specified in §63.11223." **[Reference: 40 CFR §63.11201(b) and Table 2, Item 3]**

2. "These standards apply at all times." **[Reference: 40 CFR §63.11201(d)]**

3. "If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management standard no later than March 21, 2014." **[Reference: 40 CFR §63.11196(a)(1) and 40 CFR §63.11210(c)]**

Compliance Demonstration

1. The Permittee must conduct a biennial performance tune-up no more than 25 months after the previous tune-up. **[Reference: 40 CFR §63.11223(a)]**
2. The Permittee must conduct a biennial tune-up of the boiler to demonstrate continuous compliance as specified below:
   (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months).
   (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
   (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
   (iv) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
   (v) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
   (vi) Maintain onsite and submit, if requested by the Department, a biennial report containing the following information:

i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
ii. A description of any corrective actions taken as a part of the tune-up of the boiler.
iii. The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

(vii) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

[Reference: 40 CFR §63.11223(b)(1) through (7)]

3. The Permittee must operate and maintain, at all times, any affected source, including air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. **[Reference: 40 CFR §63.11205(a)]**

4. The Permittee must keep a copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted as required in 40 CFR §63.10(b)(2)(xiv). **[Reference: 40 CFR §63.11225(c)(1)]**

5. The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 as follows:
   (i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
   (ii) Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

   [Reference 40 CFR §63.11225(c)(2)]

6. The Permittee must keep records of the occurrence and duration of each malfunction of the boiler or of associated air pollution control equipment and monitoring equipment. **[Reference: 40 CFR §63.11225(c)(4)]**

7. The Permittee must keep records of actions taken during periods of malfunctions to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler to it's normal or usual manner of operation. **[Reference: 40 CFR §63.11225(c)(5)]**

8. The Permittee must keep the records in a form suitable and readily available for expeditious review. Each record must be kept for five (5) years following the date of each recorded action. The records must remain on site for at least two (2) years after the date of each recorded action. **[Reference: 40 CFR §63.11225(d)]**

Emission Units: EU2-2

Emergency Generator

One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator. (6-0169)

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05E - Stationary Internal Combustion Engine Powered Equipment.

"(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) Exceptions.

(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(i) Engines that are idled continuously when not in service: 30 minutes;

(ii) All other engines: 15 minutes.

(c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

Compliance Demonstration

The Permittee shall properly operate and maintain the emergency generator in a manner to prevent visible emissions. The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. [**Reference: COMAR 26.11.03.06C].** The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, "Report of Excess Emissions and Deviations"

B. Control of Sulfur Oxides Emissions

COMAR 26.11.09.07A(1)(c). Sulfur Content Limitations for Fuel. ”A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: Distillate fuel oils, 0.3 percent.”

Compliance Demonstration

The Permittee shall obtain a certification from the fuel supplier that the fuel oil is in compliance with the sulfur in fuel limitation. **[Reference: COMAR 26.11.03.06C]** The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation. The Permittee shall report fuel supplier certifications to the Department upon request [**Reference: COMAR 26.11.09.07C]**

C. Operational Limits

The emergency generator shall be used for emergency use only and shall not operate more than 500 hours a year, unless the Permittee obtains prior written approval from the Department. **[Reference: MDE Permit to Construct Nos. 9-0169 Part D(2) issued May 15, 2007]**

Compliance Demonstration

The Permittee shall maintain a log for the emergency generator indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e. maintenance or operational testing, power outage, etc.) The Permittee shall maintain logs on site for at least five (5) years and make available to the Department upon request. **[Reference: MDE Permit to construct No. 9-0169, Part E(1) issued May 15, 2007]**

The Permittee shall submit a record of the logs with the annual emissions certification report. See permit condition 8 of Section III. [**Reference: COMAR 26.11.03.06C]**

Emission Units: EU2-2 Cont’d

Emergency Generator

One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator. (6-0169)

Applicable Standards and limits:

§63.6595 - When do I have to comply with this subpart?
(a) *Affected sources.* (1)" ….. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, **or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.** …..".

§63.6603 - What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.
(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions
As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an

unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

§63.6605 - What are my general requirements for complying with this subpart?

"(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."

Compliance Demonstration

The Permittee must install a non-resettable hour meter if one is not already installed. **[Reference:§63.6625(f)]**
The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
The Permittee must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.
(i) There is no time limit on the use of emergency stationary RICE in emergency situations.
(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited.
The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must

document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **[Reference: §63.6640(f)]**

The Permittee must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. **[Footnote 2 of Table 2d]**

Emission Units: EU3-1, EU3-2, EU3-3, EU3-4

EU3-1: Natural FPM Product Area vented through the oxidizer control system.
EU3-2: Filled FPM Products Area vented through the oxidizer control system.
EU3-3: FPM Processing Area vented to atmosphere.
EU3-4: Ovens vented to Oxidizer control system

Applicable Standards and limits:

Control of VOC Emissions
COMAR 26.11.19.02I – Good Operating Practices, Equipment Cleanup and VOC Storage
"(1) Applicability. The requirements in this section apply to a person who owns or operates an installation that is subject to any requirement in this chapter.
(2) Good Operating Practices.
(a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.
(b) Good operating practices shall, at a minimum, include the following:
(i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment;
(ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use;
(iii) Minimize spills of VOC-containing cleaning materials;
(iv) Convey VOC-containing cleaning materials from one location to another in closed containers or pipelines;
(v) Minimize VOC emissions from cleaning of storage, mixing, and conveying equipment;
(vi) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;
(vii) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and

(viii) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.
(c) A person subject to this regulation shall:
(i) Establish good operating practices in writing;
(ii) Make the written operating practices available to the Department upon request; and
(iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training.
(3) Equipment Cleanup.
(a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps.
(b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following:
(i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers;
(ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used;
(iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and
(iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment.
(4) VOC Storage and Transfer.
(a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more to minimize VOC emissions.
(b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia. “

Compliance Demonstration

The Permittee shall conduct facility-wide inspections at least once per calendar month to determine the compliance status of facility operations with regard to implementation of “good operating practices” designed to minimize emissions of VOC. **[Reference: COMAR 26.11.03.06C**]
The Permittee shall maintain:

(1) Written descriptions of all "good operating practices" designed to minimize emissions of VOC from facility-wide operations. **[Reference: COMAR 26.11.19.02I]**
(2) Records of all inspections conducted to determine the facility's compliance status with regard to implementation of "good operating practices" designed to minimize emissions of VOC from facility-wide operations. The records shall include for each inspection the name of the inspector, the date and time of the inspection, and an account of the findings. **[Reference: COMAR 26.11.03.06C]**

Good operating practices information as required by COMAR 26.11.19.02I shall be made available to the Department upon request.

Emission Units: EU2-2, EU3-1, EU3-2, EU3-3, EU3-4, EU4-1

EU2-2: Emergency Generator
EU3-1: Natural FPM Product Area vented through the oxidizer control system.
EU3-2: Filled FPM Products Area vented through the oxidizer control system.
EU3-3: FPM Processing Area vented to atmosphere.
EU3-4: Ovens vented to Oxidizer control system.
EU4-1: VOC Storage Tanks

Applicable Standards and limits:

Control of VOC Emissions
COMAR 26.11.19.16C - Control of VOC Leaks
General Requirements. "A person subject to this regulation shall comply with all of the following requirements:
(1) Visually inspect all components on the premises for leaks at least once each calendar month.
(2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak has been repaired.
(3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours.
(4) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part.

(5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe fittings.
(6) Maintain a log that includes the name of the person conducting the inspection and the date on which leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Leak records shall be maintained for a period of not less than 2 years from the date of their occurrence."
COMAR 26.11.19.16D. Exceptions. "Components that cannot be repaired as required in this regulation because they are inaccessible, or that cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown."

Compliance Demonstration

The Permittee shall:
(1) Visually inspect all components (process equipment, storage tanks, pumps, compressors, valves, flanges, pipeline fittings, pressure relief valves) at the facility for VOC leaks at least once each calendar month;
(2) Tag any VOC leak immediately with I.D. Number, the date VOC leak was discovered, and the name of the person who discovered the VOC leak. The tag is to remain in place until the VOC leak is repaired;
(3) Take immediate action to repair/control all observed VOC leaks that can be repaired within 48 hours;
(4) Repair all other VOC leaking components not later than 15 days after the VOC leak is discovered in accordance with COMAR 26.11.19.16C(4);
(5) If a replacement part is needed, it shall be ordered within 3 days after discovery of the VOC leak and the leak shall be repaired within 48 hours after receiving the part;
(6) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced; and
(7) Identify in a log components that cannot be repaired as required by this regulation because they are inaccessible, or that cannot be repaired during operation of the source, and include them within the source's maintenance schedule for repair during the next source shutdown.

[Reference: COMAR 26.11.19.16C and D]

The Permittee shall:
(1) Maintain a log that includes the name of the person conducting the inspection, the date on which VOC leak inspection was made, the findings of the inspection, a list of VOC leaks by tag identification number, the date the part was ordered, and the date the VOC leak was repaired; and

(2) Make the log available to the Department upon request and shall be maintained for a period of not less than two years from the date of the VOC leaks' occurrence.

[Reference: COMAR 26.11.19.16C(6)]

VOC Leak inspection logs as required by COMAR 26.11.19.16 shall be made available to the Department upon request.

Emission Units: EU3-1, EU3-2, EU3-3, EU3-4

EU3-1: Natural FPM Product Area vented through the oxidizer control system.
EU3-2: Filled FPM Products Area vented through the oxidizer control system.
EU3-3: FPM Processing Area vented to atmosphere.
EU3-4: Ovens vented to Oxidizer control system.

The oxidizer control system (OCS) includes the following oxidizers: SARA (oxidizer #1), T-Ox (oxidizer #2) and WILLIE (oxidizer #3). The OCS operates in a lead-lag fashion. Willie acts as the lead oxidizer and handles most of the load, most of the time, with SARA in standby mode and Tec standby/shutdown mode (off-line and cool). As Willie approaches maximum capacity, SARA begins to ramp up to the set point combustion temperature. Tec is used during emergency situations, and as backup when maintenance is required on Willie or SARA, and for additional control as needed.

Stack testing was conducted on September 13 & 14, 2011 on WILLIE and SARA located at the Cherry Hill Plant to determine VOC removal efficiency. The test was conducted by Air Monitoring Specialists, Inc. Three one-hour test runs were performed on each RTO. The average VOC removal efficiency for the WILLIE RTO was determined to be 98.05% and the average VOC removal efficiency for the SARA RTO was determined to be 99.17%. Both of those percentages are greater than the 85% control efficiency required by COMAR 26.11.19.30E, therefore both of the oxidizers meet the regulatory requirement.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.06.02C(1) – Visible Emission Standards. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."

COMAR 26.11.06.02A(2) – General Exception. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

Compliance Demonstration
The Permittee shall visually inspect the exhaust of the oxidizer control system at least monthly for a 6-minute period when the process lines are in operation and shall record the result of each observation. If no visible emissions are observed in six consecutive monthly observations, the frequency of the visual observation may decrease from monthly to quarterly. If emissions are visible greater than 20 percent opacity from the oxidizer control system, the Permittee shall perform the following unless it can be shown through a Method 9 test, that the visible emissions are zero percent opacity:
(a) inspect all process and/or control equipment related to emission point;
(b) perform all necessary repairs and/or adjustments to the oxidizers, within 48 hours, so that visible emissions in the exhaust gases are less than 20 percent opacity; and
(c) document, in writing, the results of the inspections and the repairs and/or adjustments made to the oxidizers.
If visible emissions greater than 20 percent opacity have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation for 18-minutes once daily when the process lines are in operation until the visible emissions have been reduced to less than 20 percent opacity. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall keep records of the results of visual emission observations and document any incidence of visible emissions and corrective action taken by the Permittee. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations"

B. Control of VOC Emissions
COMAR 26.11.19.30E – General Requirements for FPM Process Installations
"(1) A person who owns or operates an FPM process installation that has actual uncontrolled VOC emissions of 50 pounds or more per day shall vent the emissions into a thermal oxidizer system or other control method approved by the Department to destroy or reduce VOC emissions by 85 percent or more, overall.
(2) If a thermal oxidizer is installed, the oxidizer combustion chamber shall be:
(a) Operated at a minimum combustion chamber temperature of 1400°F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation;

(b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and
(c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved temperature; and
(d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating.
(3) If a source uses an alternative control method approved by the Department, the alternative control method shall be monitored as required by the Department.
(4) Equipment that is installed for the purpose of treating emissions or monitoring shall be operated, maintained, and as applicable, calibrated in accordance with the equipment vendor's specifications.
(5) A person who owns or operates an FPM compounding and tape or shape-forming installation shall minimize fugitive emissions of VOC by:
(a) Immediately enclosing all wet FPM during storage; and
(b) Covering dipping troughs when not in operation.
(6) A person who owns or operates an FPM coating installation that has actual uncontrolled VOC emissions of 20 pounds or more per day may not use a coating that has a VOC content exceeding 2.9 pounds per gallon unless the installation is equipped with a control device that meets the requirements in §E(2), (3), and (4) of this regulation."

Compliance Demonstration

COMAR 26.11.19.30F. Demonstration of Compliance. "Compliance with this regulation shall be demonstrated using the applicable VOC test methods specified in COMAR 26.11.01.04C or other test method approved by the Department."

The Permittee shall conduct performance testing of the primary oxidizer in the control system once during the 5-year term of the permit. The Permittee shall submit a test protocol to the Department for approval at least 30 days prior to proposed date of the test. The Permittee shall report results of the performance testing to the Department within 45 days after completion of the test. [**Reference: COMAR 26.11.03.06C].**

For the oxidizer control system, the combustion chamber shall be:

(a) Operated at a minimum combustion chamber temperature of 1400 ^{o}F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation;
(b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and
(c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved temperature; and

(d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating." [Reference: **COMAR 26.11.19.30E(2)].**

The Permittee shall perform checks semi-annually on the thermocouples that monitor the temperatures to the oxidizer control system for accuracy.

The following records shall be kept on site for a period of at least five (5) years except for the design data, which shall be retained permanently. The records shall be made available to the Department on request:

(1) Permanent records**,** for the life of the equipment**,** of pertinent design data for the control device including manufacturer specifications and/or vendor guarantees for the control device and catalyst, catalyst requirements, design space velocity, operating limits, volume and configuration of catalyst required;
(2) Maintenance records of types and dates of work performed on the oxidizer control system;
(3) Records of the combustion chamber temperature, which shall be greater than 1400 ^{o}F any time a controlled process line is in operation; and
(4) Records of the results of destruction efficiency tests.
(5) The Permittee shall keep records of the damper position and corresponding chamber temperature on site for at least five years.
(6) The Permittee shall keep records of the semi-annual checks of the thermocouples on site for at least five years.

The Permittee shall make the records of the thermo couple checks made available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

See CAM Plan (40 CFR Part 64 – Compliance Assurance Monitoring) in Table 6 for additional Monitoring Requirements.

Compliance Assurance Monitoring (CAM) Requirements [40 CFR Part 64]

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach established monitoring for the purpose of:

(1) Documenting continued operation of the control measures within ranges of specified indicators of performances (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements;
(2) Indicating any excursions from these ranges; and
(3) Responding to the data so that the causes of or caused excursions are corrected.

In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100 percent of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

The Pollutant specific emission units (PSEU) consist of dryers and ovens that support the fluropolymers material (FPM) shaping and forming processes. The dryers and ovens are controlled by the Oxidizer Control System (OCS), which consist of three regenerative thermal oxidizers (RTO).

The dryers and ovens are used to drive off liquid (VOC and/or water) from the fluoropolymer materials or to add certain properties to the product. The dryers and ovens are ducted to the OCS and operate as a batch process on an as needed basis depending on production demands. All the dryers and ovens are interlocked with the OCS so that they can only operate when the OCS is at temperatures greater than 1400 ^{o}F or other temperature approved by the Department. If temperatures approach 1400 ^{o}F (or other approved temperature), the alarm system will alert operators of low temperatures and if the low temperature is not corrected the OCS will go offline and production equipment will automatically be shutdown.

Rationale for selection of Performance Indicators
The OCS is used to reduce the VOC emissions generated from the evolution of VOCs from fluoropolymer materials. Production is considered batch process, so that production rate varies. Therefore it is difficult to relate the production rate of the VOC load vented to the OCS.

"VOC destruction efficiency depends upon design criteria (i.e. chamber temperature, residence time, inlet VOC concentration, compound type, and degree of mixing). Thermal destruction of most organic compounds occurs between 590 ^{o}C and 650 ^{o}C (1100 ^{o}F and 1200 ^{o}F)." (EPA-COCA Fact Sheet: Thermal Incinerator).

Manufacture Design Criteria

OSC Components	Maximum gas flow rate inlet	Retention time	VOC Destruction
Oxidizer #1 (SARA)	40,566 acfm	0.5 sec	95 to 98%
Oxidizer #2 (T-Ox)	35,849 acfm	0.5 sec	95 to 98%
Oxidizer #3 (WILLIE)	40,566 acfm	0.5 sec	95 to 98%

RTOs utilize the opening and closing of dampers to routinely change the direction of airflow over the beds. This change of airflow direction helps improve mixing of the gases and maintains uniform temperature across the beds. Incomplete combustion in the RTO may be indicated by visible emissions from the stack.

In accordance with 40 CFR 64.4(b)(1) - Presumptively acceptable monitoring includes:
"Presumptively acceptable or required monitoring approaches, established by the permitting authority in a rule that constitutes part of the applicable implementation plan required pursuant to Title I of the Act that are designed to achieve compliance with this part for particular pollutant-specific emissions units."
COMAR 26.11.19 achieves the requirements of Title I of the Clean Air Act, Section110. State Implementation Plan (SIP) for VOC and requirement for this source is listed in COMAR 26.11.19.30E&F.

Rationale for selection of Indicator Ranges
Indicator ranges are based on requirements of the Maryland regulation and are supported by the stack testing data. VOC destruction of most organic compounds occurs between 1100 ^{o}F and 1200 ^{o}F. During stack testing in September 2011, SARA had a destruction efficiency of 99.17% at a set point of 1250 ^{o}F, and WILLIE had a destruction efficiency of 98.05% at 1350 ^{o}F.

Test methods used to determine VOC destruction efficiency includes EPA Test Method 25A.

Stack Test Data

	Date of Compliance Demonstration	Combustion Temperature	Destruction Efficiency (average of 3 runs)
SARA, Oxidizer #1	2011, September	1250 ^{o}F	99.17 %
TEC, Oxidizer #2	1998, June 17	Approximately 1600 ^{o}F	99.10 %
WILLIE, Oxidizer #3	2011, September	1350 ^{o}F	98.05 %

See Table 6 for Monitoring Approach.

COMPLIANCE SCHEDULE

W.L. Gore & Associates, Inc.-Cherry Hill is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable.

TITLE VI – OZONE DEPLETING SUBSTANCES

W.L. Gore & Associates, Inc.-Cherry Hill is subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

W.L. Gore & Associates, Inc.-Cherry Hill is not subject to the requirements of Section 112(r).

PERMIT SHIELD

W.L. Gore & Associates, Inc.-Cherry Hill did request a permit shield. The Cherry Hill facility requested that a permit shield be expressly included in the Permittee's Part 70 permit. Permit shields are granted on an emission unit by emission unit basis. If an emission unit is covered by a permit shield, a permit shield statement will follow the emission unit table in Section IV - Plant Specific Conditions of the permit. In this case, a permit shield was granted for each emission unit covered by the permit.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 12 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas I, II, V, and VI]

The *fuel burning units* are subject to the following requirements: COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.
Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 2 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The *affected units* are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(D) COMAR 26.11.36.03A(1), which establishes that the Permittee may not operate an emergency generator except for emergencies, testing and maintenance purposes.

(E) COMAR 26.11.36.03A(5), which establishes that the Permittee may not operate an emergency generator for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(3) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(4) No. 217 Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The *affected units* are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(a) Monthly records of the total VOC degreasing materials used; and

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(5) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 30 Storage of lubricating oils;

(c) No. 5 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(d) No. 324 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(6) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(7) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(8) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;

(9) ✓ Potable water treatment equipment, not including air stripping equipment;

(10) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(11) ✓ Laboratory fume hoods and vents;

For the following, attach additional pages as necessary:

(12) any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

Installation Date	General Category	Describe this equipment	CH Nos.
Jun-89	Forming	Extruder	447
Jun-89	Forming	Extruder	1304
Jun-89	Forming	Extruder	1322
Jun-89	Forming	Extruder	1323
Jun-92	Forming	Extruder	1949
Pre-1990	Forming	Extruder	2013
Pre-1990	Forming	Extruder	2052
Pre-1990	Forming	Extruder	2069
Pre-1990	Forming	Extruder	2371
Dec-07	Forming	Extruder	1991534
Pre-1990	Forming	Extruder	2101
Pre-1990	Forming	Extruder	976
Pre-1990	Misc	Bag Dump Stations	0
Jul-02	Shaping	FM Line	45159
Oct-04	Shaping	Heat treat exhausts	65128
Mar-05	Shaping	Tenter for wet tapes	2180

(13) any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

Installation Date	General Category	Describe this equipment	CH Nos.
Jan-85	Misc	Paint Booth	5800
Dec-07	Conditioning	Pellet Oven	74820
Mar-07	Conditioning	Pellet Oven	0
Pre-1990	Conditioning	Pellet Oven	2166
Pre-1990	Conditioning	Pellet Oven	2413
Pre-1990	Conditioning	Pellet Oven	2443
Pre-1990	Conditioning	Pellet Oven	2444

Installation Date	General Category	Describe this equipment	CH Nos.
Pre-1990	Conditioning	Pellet Oven	2445
Jun-89	Drying	Dryer Rolldown	126
Aug-82	Drying	Lab Ovens	963
Pre-1990	Drying	Lab Ovens	2211
Nov-95	Drying	Ovens, R&D	2328
Jan-02	Forming	R&D ACIS	62347
Nov-02	Forming	R&D Jenny	62924
Jan-12	Heat Treat	Lab Oven	
Pre-1990	Misc	Chem Storage Cabinets	0
2011	Misc	Propane Vaporizers	0
12/23/2008	Misc	Slitter	
Jan-07	Misc	Steam Generators	
Jan-07	Misc	Steam Generators	
Jan-07	Misc	Steam Generators	
Jan-07	Misc	Steam Generators	
Jan-85	Misc	Welding Hood	
Sep-08	Shaping	Calendaring w/dip	2218692
Pre-1989	Shaping	Calendaring line	244
Pre-1990	Shaping	Calendaring line	1693
Mar-03	Shaping	Calendaring line	6044
Jan-07	Shaping	Calendaring line	74770
	Shaping	Calendaring line	825
	Shaping	Calendaring line	1367
	Shaping	Calendaring line	1368
	Shaping	Calendaring line	1393
	Shaping	Calendaring line	2055
	Shaping	Calendaring line	2070
	Shaping	Calendaring line	2606
Pre-1990	Shaping	Calendaring w/dip	238
Pre-1990	Shaping	Calendaring w/dip	239
Pre-1990	Shaping	Calendaring w/dip	242
Pre-1989	Shaping	Calendaring w/dip	242
Pre-1990	Shaping	Calendaring w/dip	244
Jan-11	Shaping	Expander	20006546
Jan-02	Shaping	Heat treat exhaust	62933
Aug-02	Shaping	Heat treat exhaust	74794
Pre-1989	Shaping	Heat treat exhaust	853
Pre-1989	Shaping	Heat treat exhaust	982
Pre-1989	Shaping	Heat treat exhaust	1425
Pre-1989	Shaping	Heat treat exhaust	1761
Pre-1990	Shaping	Heat treat exhaust	2344
2002	Shaping	Heat treat exhaust	2411
2003	Shaping	Heat treat exhaust	61670
Nov-08	Shaping	Heat treat exhaust	76724
Dec-08	Shaping	Heat treat exhaust	79796
May-07	Shaping	Heat treat, dry	72974
	Shaping	Plate Machine w/IK dip	2310

No. 1 _____

No. 1 _____

No. 1 _____

No. 1 _____

No. 1 _____

STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contain state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

1. Applicable Regulations:

   (a) COMAR 26.11.06.08 - Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

   (b) COMAR 26.11.06.09 – Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that nuisance or air pollution is created."

   Emission Unit: EU2-1 - Boilers

   (c) COMAR 26.11.09.10 - Requirements to Burn Used Oil and Waste Combustible Fluid as Fuel.
   "A. General Requirements.
   (1) A person who proposes to burn used oil in fuel-burning equipment shall submit the following information to the Department:
   (a) A description of any fuel-burning equipment in which used oil is to be burned, including the unit's location and rated heat input capacity;
   (b) The type and amount of fuel currently being used in any fuel-burning equipment in which used oil is to be burned and the gallons of used oil expected to be burned annually;

(c) The maximum blend (percent) of used oil to be burned as fuel in any fuel-burning equipment at any time; and
(d) An analysis by an independent laboratory of a representative sample of the used oil, which shall include the concentration of each of the materials listed in §B of this regulation, the sulfur content, the PCB concentration, and the flash point.
(2) A person who burns fuel oil in fuel-burning equipment with a rated heat input capacity less than 50 million Btu per hour in accordance with a permit to construct or a registration pursuant to COMAR 26.11.02.02A may burn on-specification used oil in that equipment after submitting the information in §A(1) of this regulation.
(3) A person who is burning used oil or WCF under a current written approval from the Department may continue to burn the approved material if:
(a) The person demonstrates that any WCF being burned satisfies the definition of that term in Regulation .01B(23) of this chapter;
(b) The used oil or WCF is being burned in an authorized installation;
(c) The conditions of the approval are continuously met; and
(d) The sulfur requirement in §B(1)(g) of this regulation is not exceeded.
(4) A person shall obtain written approval from the Department before burning:
(a) On-specification used oil in any fuel-burning equipment that has not been registered or previously issued a permit to construct pursuant to COMAR 26.11.02.02 to burn fuel oil;
(b) On-specification used oil in any fuel-burning equipment that has a rated heat input capacity of 50 million Btu per hour or greater;
(c) On-specification used oil in any installation other than fuel-burning equipment; or
(d) Waste combustible fluid or off-specification used oil as fuel in any installation.
(5) A person who obtains written approval from the Department to burn used oil or WCF shall burn only those materials for which approval has been obtained.
(6) Except as provided in §A(7) of this regulation and notwithstanding any applicable conditions in permits issued by the Department, a person may burn off-specification used oil only in those installations listed at 40 CFR §279.12(c).
(7) The requirement to burn off-specification used oil only in those installations listed at 40 CFR §279.12(c) does not apply if the used oil is off-specification only because of the sulfur content.
B. Specifications for Used Oil.
(1) Except as provided in §B(2) of this regulation, used oil specifications are as follows:

Material	Allowable Level
(a) Lead	100 ppm
(b) Total halogens	1,000 ppm
(c) Arsenic	5 ppm
(d) Cadmium	2 ppm
(e) Chromium	10 ppm
(f) Flash point	100°F minimum
(g) Sulphur content	0.5 weight percent

(2) For used oil that satisfies the rebuttable presumption for halogens at 40 CFR §279.10(b)(1)(ii) and 40 CFR §279.63, the maximum allowable level for halogens is 4,000 ppm.
C. Additional Requirements for Burning Used Oil or WCF Containing Polychlorinated Biphenyls (PCBs).
(1) Used oil or WCF containing quantifiable levels of PCB (i.e. 2 ppm or greater, but less than 50 ppm) may be burned only in those installations listed at 40 CFR §279.12(c) or 40 CFR §761.
(2) Used oil or WCF with a PCB concentration of 50 ppm or greater is hazardous waste and may only be burned in accordance with the requirements in COMAR 26.13.07 and 40 CFR §761.
D. Reporting Requirements. By April 1of each year, a person subject to this regulation shall submit a report, in accordance with COMAR 26.11.01.05C, that provides information on:
(1) The quantity of used oil or WCF burned during the previous year; and
(2) The equipment in which the used oil or WCF was burned.

(d) COMAR 26.11.15.05 - Control Technology Requirements**.**
"A. New or Reconstructed Installations. A person may not construct, reconstruct, operate, or cause to be constructed, reconstructed, or operated, any new installation or source that will discharge a toxic air pollutant to the atmosphere without installing and operating T-BACT."

(e) COMAR 26.11.15.06 - Ambient Impact Requirement.
A. Requirements for New Installations, Sources, or Premises.
(1) Except as provided in §A(2) of this regulation, a person may not construct, modify, or operate, or cause to be constructed, modified, or operated, any new installation or source without first demonstrating to the satisfaction of the Department using procedures established in this chapter that total allowable emissions from the premises of each toxic

air pollutant discharged by the new installation or source will not unreasonably endanger human health.
(2) If a new installation or source will discharge a TAP that is not listed in COMAR 26.11.16.07 and will be part of an existing premises, then emissions of that TAP from existing sources or existing installations on the premises may be omitted from a screening analysis unless the TAP is added to COMAR 26.11.16.07.

Emission Unit: EU2-2 - Emergency Generator
COMAR 26.11.36.03A – Emergency Generators and Load Shaving Units NO_X Requirements.
"A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.
(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.
(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.
(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:
(a) Located at a nuclear power plant; or
(b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.
(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.
(5) The owner or operator of an emergency generator or load shaving unit may not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.
(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation."

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

(a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
(b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.